

Amendments to the Claims

Please amend the claims as indicated below.

1. (Currently amended) A compound comprising a target cell-specific portion and a cytotoxic portion characterised in that:
 - (i) the target cell-specific portion comprises an humanised monoclonal antibody having specificity for polymorphic epithelial mucin (PEM), or an antigen binding fragment thereof; and
 - (ii) the cytotoxic portion has endonucleolytic activity; wherein the target cell-specific portion comprises an humanised HMFG-1 antibody or an antigen binding fragment thereof.
2. (Cancelled).
3. (Currently amended) A compound according to Claim 2 1 wherein the target cell-specific portion is an humanised HMFG-1 antibody.
4. (Previously presented) A compound according to Claim 1 wherein the target cell-specific portion comprises an antigen binding fragment of the humanized antibody selected from the group consisting of Fab-like molecules, such as Fab and F(ab')2, Fv molecules, disulphide-linked Fv molecules, ScFv molecules and single domain antibodies (dabs).
5. (Original) A compound according to Claim 4 wherein the target cell-specific portion comprises a Fab molecule.

Response to Office Action

Serial No.: 09/825,012

Page 3

6. (Original) A compound according to Claim 4 wherein the target cell-specific portion comprises a F(ab')₂ molecule.
7. (Currently amended) A compound according to Claim 1 wherein the target cell-specific portion comprises an amino acid sequence that is an antigen binding fragment encoded by at least part of one or both of the nucleotide sequences of Sequence ID's 7 and 10-12.
8. (Original) A compound according to Claim 7 wherein the target cell-specific portion comprises an amino acid sequence encoded by the nucleotide sequence of Sequence ID 7 and an amino acid sequence encoded by the nucleotide sequence of Sequence ID's 10, 11, and 12.
9. (Previously presented) A compound according to Claim 1 wherein the cytotoxic portion has DNA endonucleolytic activity.
10. (Original) A compound according to Claim 9 wherein the cytotoxic portion is at least the catalytically active portion of a DNA endonuclease.
11. (Original) A compound according to Claim 10 wherein the endonuclease is a mammalian deoxyribonuclease I.
12. (Original) A compound according to Claim 11 wherein the endonuclease is a human deoxyribonuclease I.
13. (Original) A compound according to Claim 1 wherein the endonuclease is a restriction endonuclease.

14. (Original) A compound according to Claim 10 wherein the cytotoxic portion comprises the amino acid sequence shown in Sequence ID's 3 and 4 or (b).
15. (Previously presented) A compound according to Claim 1 wherein a nuclear localization signal is incorporated.
16. (Original) A compound according to Claim 15 wherein the nuclear localization signal comprises the sequence PKKKRKV (SEQ ID NO:96).
17. (Previously presented) A compound according to Claim 1 wherein the target cell-specific portion and the cytotoxic portion are fused.
18. (Original) A compound according to Claim 17 wherein the target cell-specific portion and the cytotoxic portion are separated by a linker sequence.
19. (Original) A compound according to Claim 18 wherein the linker sequence is or comprises GG or GSGG (SEQ ID NO:97).
20. (Currently amended) A compound according to Claim 1 wherein the compound comprises all or any antigen binding part of the amino acid sequence as shown in Figure 3(c) together with all or any antigen binding part of an amino acid sequence selected from the group consisting of amino acid sequences as shown in Figures 5(d), 6(d), 7(b), 8(b), 9(b), 10(b), 11(b), 12(b), 13(d), 14(d), 15(d), 16(c), 17(d), 18(d), and 19(d).
21. (Original) A compound according to Claim 20 wherein the compound comprises an amino acid sequence as shown in Sequence ID 9 and an amino acid sequence as shown in Sequence ID's 45 and 46.

22. (Original) A compound according to Claim 20 wherein the compound comprises an amino acid sequence as shown in Sequence ID 9 and an amino acid sequence as shown in Sequence ID 's 70 and 71.
23. (Withdrawn) A nucleic acid molecule encoding a compound as defined in Claim 1.
24. (Withdrawn) A nucleic acid molecule according to Claim 23 wherein the molecule comprises all or part of the nucleotide sequence as shown in Sequence ID 7 or 8 together with all or part of a nucleotide sequence selected from the group consisting of nucleotide sequences as shown in Sequence ID's 34, 35, 36, 39, 40, 41, 44, 47, 50, 53, 56, 59, 62, 63, 64, 67, 68, 69, 72, 73, 74, 77, 78, 81, 82, 83, 86, 87, 88, 91, 92, and 93.
25. (Withdrawn) A nucleic acid molecule according to Claim 24 wherein the molecule comprises a nucleotide sequence as shown in Sequence ID 8 and a nucleotide sequence as shown in Sequence ID 44.
25. (Withdrawn) A nucleic acid molecule according to Claim 24 wherein the molecule comprises a nucleotide sequence as shown in Sequence ID 8 and a nucleotide sequence as shown in Sequence ID 69.
26. (Withdrawn) A nucleic acid molecule according to Claim 23 wherein the molecule further comprises a Kozak consensus ribosome-binding site.
27. (Withdrawn) A vector comprising a nucleic acid molecule according to Claim 23.
28. (Withdrawn) A host cell comprising a vector according to Claim 27.

29. (Previously presented) A pharmaceutical composition comprising a compound according to Claim 1 and a pharmaceutically acceptable carrier.
30. (Previously presented) A compound according to Claim 1 for use in medicine.
31. (Previously presented) Use of a compound according to Claim 1 in the preparation of a medicament for treating a mammal having said target cells to be destroyed.
32. (Withdrawn) A method of treating a mammal having target cells to be destroyed, the method comprising administering a compound according to Claim 1 to said mammal.
33. (Previously presented) A use according to Claim 31 wherein the mammal is a human.
34. (Previously presented) A use according to Claim 31 wherein the target cells to be destroyed are cancer cells.
35. (Previously presented) A use according to Claim 34 wherein the cancer cells are epithelial cancer cells.
36. (Previously presented) A use according to Claim 35 wherein the cancer cells are ovarian, gastric, colorectal and/or pancreatic cancer cells.

37. (Previously presented) A use according to Claim 36 wherein the cancer cells are ovarian cancer cells.
38. (Cancelled).
39. (Currently amended) A method according to Claim 32 wherein the mammal is a human.
40. (Currently amended) A method according to Claim 32 wherein the target cells to be destroyed are cancer cells.
41. (Previously presented) A method according to Claim 40 wherein the cancer cells are epithelial cancer cells.
42. (Previously presented) A method according to Claim 41 wherein the cancer cells are ovarian, gastric, colorectal and/or pancreatic cancer cells.
43. (Previously presented) A method according to Claim 42 wherein the cancer cells are ovarian cancer cells.